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APPLICATION NO.	FILING DATE	FIRST NAMED-INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,228	06/20/2003	Richard J. DeGroot	1.911.4	9164

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EXAMINER

WEBB, GREGORY E

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,228

Applicant(s)

DEGROOT ET AL.

Examiner

Gregory E. Webb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3,5-7,14,16,18,20-22 and 29 is/are rejected.
- 7) ☐ Claim(s) 2,4,8-13,15,17,19,23-28 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 102204.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3, 5-7, 14, 16, 18, 20-22, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al (US 6,312,759).

Yamada teaches cleaning compositions containing fluorinated hydrocarbons (see abstract).

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Yamada teaches azeotropic compositions containing 1,1,2,3,3,4-heptafluorocyclopentane with other hydrocarbons and alcohols (see cols. 6-7).

Yamada teaches a specific azeotropic compositions containing the heptafluorocyclopentane and trans-1,2-dichloroethylene (see col. 7, lines 5-50).

Concerning the halogenated second component, Yamada teaches the following:

With no specific limitation, the chlorinated hydrocarbons include for example methylene chloride, dichloroethane, dichloroethylene, trichloroethylene and perchloroethylene.(see col. 8, lines 41-44)

Concerning the preferred alcohols, Yamada teaches the following:

With no specific limitation, the alcohols include for example methanol, ethanol, isopropanol, n-propanol, n-butanol, s-butanol, t-butanol, n-pentanol, isopentanol, n-hexanol, isohexanol, 2-ethylhexanol and n-octanol. Among them, preference is given to alcohols with 5 or less carbon atoms; and furthermore, alcohols with 1 to 4 carbon atoms are specifically preferable.(see col. 8, lines 25-31).

Allowable Subject Matter

1. Claims 2, 4, 8-13, 15, 17, 19, 23-28, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The applicant's specific combination of the fluorocyclopentane and the bromopropane was not found in the prior art of record. Although the prior art teaches the use of the

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fluorocyclopentane in combination with various other halogenated solvents, the prior art provides no motivation for the substitution of the taught halogenated solvents for the applicant's preferred use of the bromopropane. As there are literally thousands of halogenated solvents one would not have been motivated to make this specific substitution. As such these claims are found to be allowable.

3. Also of relevance, Milbrath et al (US 6,274,543) teaches solvent compositions containing dichloroethylene and a fluorinated solvent. Milbrath fails to teach or provide motivation for using the specific combination of solvents as required by applicant.

4. Sekiya et al (US 6,403,846) teaches methods of preparing various fluorinated solvents including fluorocyclopentanes.

5. Takada et al (US 6,218,586) and Ide et al (US 5,599,783) teach the use of fluorocyclopentane but fails to teach the combination with the applicant's second component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'G. Webb', with a stylized, wavy line extending from the end.

Gregory E. Webb
Primary Examiner
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gew